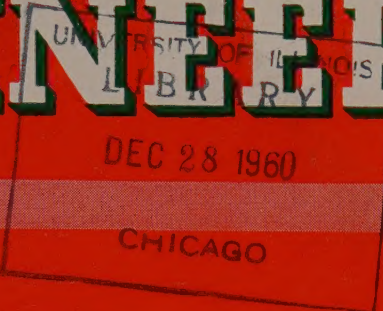




the ILLINOIS ENGINEER



It
came
to pass
in those
days, that
a decree went
forth from Caesar
Augustus that a cen-
sus of the whole world
should be taken. This
first census took place while
Cyrinus was Governor of Syria.
And all were going, each to his own
town, to register. And Joseph also
went from Galilee out of the town of Naz-
areth into Judea to the town of David, which
is called Bethlehem, being of the family and
house of David, to register together with Mary
his espoused wife who was with child. And it came
to pass while they were there, that the days for her to
be delivered were fulfilled. And she brought forth her
first-born son, wrapped him in swaddling cloths and laid
him in a manger because there was no room for them in the
inn. And there were shepherds in the same district living in
the fields and keeping watch over their flocks by night. And
behold an Angel of the Lord stood by them and
the glory of God shone about them and they
feared exceedingly. And sud-
denly there was with the
Angel a mul-
titude of the
heavenly host
praising God
and saying:
"Glory to God in the highest and on
earth peace, good will toward men."

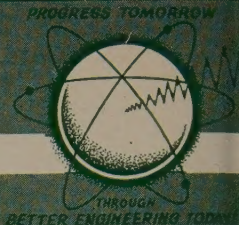




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A DEDICATION WITH A FUTURE

By LE VERNE D. HUDSON, *President*

With visions of a colorful ISPE year ahead, your Board of Direction and your Staff send you this warm greeting.

The warmth of the greeting is particularly felt during this Season of the Year because the Society is dedicated to do good for mankind. Through its objectives, our remarkable organization promotes a better and a safe way of living for all. Remember, the specialties of the registered engineer range from the broadest social aspects of industrial and community planning to the most intricate technical design. The Society activities are designed to strengthen engineering as a profession so that better engineering can be practiced. With such a positive dedication, the future pattern of growth is inevitable.

Your Officers look forward to a new and happy experience this coming year. The new funds will be available for reinforcing the committee activities and to improving communications. These will be applied so that the individual efforts and contributions will be recognized and encouraged. Many refreshing ideas will be tried, using the guiding hands of our skilled Staff members. ISPE should see activity, and consequently results, of advanced quality. You will recognize the theme that "the Society is what the individual engineer makes it".

This 75th Jubilee year of operation reminds us of the many unselfish individual contributions that will make this ISPE future possible. With this heart-warming thought and knowing the great ISPE year ahead, we extend Best Wishes for the Year 1961.



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LUNCHEON SET FOR JANUARY 7 I.S.P.E. TO PRESENT BRONZE PLAQUE TO UNIVERSITY OF ILLINOIS HONORING LATE PROFESSOR SHEDD

A bronze plaque honoring the late Thomas C. Shedd, Professor of Structural Engineering at the University of Illinois, member of ISPE, will be presented to the University of Illinois by the Illinois Society of Professional Engineers at a luncheon in the Illini Union Building, Urbana, at 12:30 p.m. on Saturday, January 7, 1961. The Board of Direction of the Society will hold its January meeting that day in the Union Building.

Professor Shedd, on the UI Civil Engineering faculty from 1922 until his retirement in 1958, died July 11, 1959. He was a member of the Illinois Structural Engineers' Examining Committee from 1944 to 1959 and served as chairman for several terms. He was a member of the Illinois Professional Engineers' Examining Committee from 1945 to 1959 and served as chairman from 1945 to 1948. He was president of the Illinois Engineering Council for two terms. He also served as president and director of the National Council of State Boards of Engineering Examiners. In 1959 the Illinois Society presented him with the Illinois Award in recognition of these services.

Two identical plaques have been prepared. One will be mounted in Civil Engineering Hall on the UI campus and the other one in Society headquarters at Springfield.

Members of Illinois Society, the UI civil engineering faculty, and friends of Professor Shedd are invited to attend the luncheon. Several members of Professor Shedd's family are expected for the occasion, including Mrs. Shedd, Urbana; a son, Thomas C. Shedd, Jr., and Mrs. Shedd, Wilmette, Ill.; and a daughter, Mrs. Richard L. Pfister, and Mr. Pfister, Hanover, N.H., and son and daughter-in-law, Mr. and Mrs. Milton C. Shedd, Cedar Grove, N. J.

Ladies are included in the invitation to attend the luncheon.

Reservations for the luncheon should be sent to Professor William A. Oliver, 218 Civil Engineering Hall, Urbana, Ill., to reach him no later than January 5, 1961. Tickets are \$2.50 each.

Serving on the committee with Professor Oliver, who is chairman, are: Professors E. E. Bauer and J. W. Briscoe, Urbana, R. Dean Collins, Springfield, and A. W. Neureuther, Decatur.

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NSPE PROPOSES CERTIFICATION PROGRAM FOR EN- GINEERING TECHNICIANS AND CERTIFIED ENGINEERING TECHNOLOGISTS

By A. C. FRIEL, P.E., *Chairman*

NSPE Engineering Technicians Committee

The Engineering Technicians Committee has been in the process of developing this program for approximately 2½ years. The committee is approaching the point at which it hopes to begin to put it into operation. It has set for itself a target date of January 1, 1961.

During this period of development, the Engineering Technicians Committee (ETC) has presented a total of 7 reports to the NSPE Board of Directors so that the officers of NSPE and the Board of Directors are fairly well-informed as to the intent of the program. However, because of the importance of this subject, it is felt by both the NSPE Executive Committee and the ETC that it is extremely important that as many members of NSPE as possible be informed on the subject before any attempt is made to actually place it into operation.

The second element of the three-part program referred to above is to be the development of a program for the Chapters of NSPE which will be issued through the NSPE State Society and Chapter Activities Committee. K. O. Werwath, P.E., Member of ETC and President of the Milwaukee School of Engineering will develop this element. It is hoped that every chapter will make an attempt to present this program to its members. The third element of this program to inform the NSPE membership on the Certification Program will be an attempt to have published in every one of the State Society Journals a short article dealing with the same subject.

We are not proposing a questionnaire upon which to voice your approval or disapproval, but we do expect your advice to NSPE Headquarters if you are opposed after you have considered all 3 elements of the three-part program as follows:

1. AMERICAN ENGINEER ARTICLE
2. ILLINOIS PROFESSIONAL ENGINEER ARTICLE
3. CHAPTER PROGRAMS

Brief History of the Subject

It is generally believed, throughout the United States at least, and probably throughout the rest of the world, that the advancements in technology are expanding at an exponential rate and the time will very soon be upon us when there will be insufficient technological manpower to keep abreast of the requirements. If this is true, it follows that something must be done as quickly as possible to develop the technological manpower required. Our domestic economy could be very seriously affected if we fail in this respect.

In addition to this factor, there appears to be a general consensus of opinion that we have fallen behind in a space exploration program and possibly in our missile

defense program. Therefore, in addition to the factor of our domestic economy, our National Defense is also involved. During the past decade, President Eisenhower's "Committee on Scientists and Engineers" was developed to investigate the shortage of scientific and engineering personnel. The establishment of such a committee on such a high level would indicate this shortage is no mere figment of the imagination and therefore merits serious consideration.

There was a real shortage of engineers during a portion of this time which seems to have been alleviated for a while, but over the long haul is going to continue. One of the findings of the President's Committee was that there was a serious need for the development of supporting technological personnel. The supporting personnel we have in mind are the Engineering Technicians.

One of the factors which contributed heavily to the lack of engineering manpower was the fact that far too many engineers were engaged in clerical routine and repetitive duties and their technical capabilities were not being employed to the fullest capacity. Not only has the situation contributed to the shortage of engineers, but the wholesale waste of their training and capability has also contributed to a considerable dissatisfaction on the part of the engineers. It is generally known that a good share of the work related to engineering does not require the training and capability of a four or five-year engineering college graduate.

Why NSPE should be interested in engineering technicians and why the subject is so important to members of NSPE and the engineering profession in general.

We have mentioned before that the National Economy and the National Defense is to considerable extent affected by the availability of engineering technician personnel. It is therefore evident that the public welfare is involved. Wherein the public welfare is involved in any matter relating to Engineering, NSPE must take an interest in the subject. If it does not, it fails in a fundamental element of a profession.

There is an aspect of this matter which affects the engineering profession alone. This is the fact that Engineering Technicians can step in and free the engineer to perform duties at a higher level of intellectual effort for which he was trained. On the other side of the scale there is a possibility that some engineers may fear that the encouragement and further development of Engineering Technicians may have a tendency to dilute the caliber of the Engineering profession. As seen by the NSPE Board of Directors and the ETC, this is not the case. The advancements in technology will require increasing numbers of engineers and Engineering Technicians. It is to the Engineer's advantage to learn now to make use of the services of these Engineering Technicians as supporting personnel to the professional engineer.

Another matter relating to this situation is the unionization of Engineering Technicians. I believe it would

entirely proper to say that the Technical Institutes, which are the primary sources of the development of Engineering Technicians, sincerely believe that it is in the best interest of their graduates that these men not become unionized. We, as professional engineers, have very clearly established that for us there is a better approach to employment problems than the union approach. If the Engineering Technicians are developed and utilized at the rate at which they should be—approximately three technicians to every professional engineer—then it becomes obvious that the engineers will soon be outnumbered by the technicians in the ratio of 3 to 1. If these technicians become unionized, this will bring the problem of unionization of engineers themselves much closer and make it more difficult for the professional engineers to fend off unionization attempts upon themselves. We have established that for professional engineers there is a better approach to employment problems than the union approach. It can be argued whether technicians are or are not professional people, but certainly they are semi-professional. It becomes obvious that they should be encouraged to seek that "better approach" to their problem. If one looks closely, he will discover that there are tremendous implications of profound importance to the Engineering profession involved here and that now is the time for action.

There is a point we wish to make perfectly clear. NSPE is not opposed to Unions per se, but we are opposed to unionism for ourselves. Since it is our objective that the engineers and the technicians will work hand-in-hand as a co-operative team, it is our belief that the interests of all concerned will best be served by the two groups operating on the same, rather than conflicting philosophies.

In view of the foregoing, the ETC has made the following recommendations to the NSPE Board of Directors, all of which have been approved by the Board.

The Recommendations of the ETC To The NSPE Board of Directors

RECOMMENDATION No. 1: NSPE, in conjunction with the Technical Societies and Engineers' Council for Professional Development, should concern itself with the affairs of Engineering Technicians. The areas of concern for each of these societies should be as follows:

- a. ECPD—Formal Educational Development
- b. Technical Societies—The technical development of the Engineering Technician.
- c. NSPE—Concern itself with the status and related problems of Engineering Technicians.

RECOMMENDATION No. 2: This recommendation concerns the definition of Engineering Technicians and is as developed by ECPD in the 1958 Report of its Recognition Committee. For more complete information, the reader is referred to an article in the AMERICAN ENGINEER, November 1959 issue.

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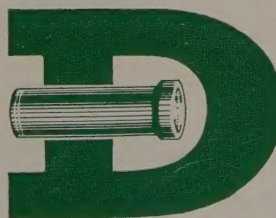
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COLLECTIVE BARGAINING BY NURSES AND OTHER PROFESSIONALS: ANOMALY OR TREND?

By WENDELL L. FRENCH and RICHARD ROBINSON

This article traces a development that may see a new type of union and a new type of union organizer—white collar being matched with white collar. Wendell L. French is an associate professor in the Department of Policy, Personnel Relations and Production at the University of Washington in Seattle. His coauthor, Richard Robinson, is assistant professor of management at Evansville College in Indiana.

This article is reprinted through the courtesy of Henry L. Stewart, Editor, LABOR LAW JOURNAL. It first appeared in the October, 1960 LABOR LAW JOURNAL, Copyright Commerce Clearing House, Inc.

WHITE-COLLAR UNIONIZATION TRENDS are being watched closely by both management and labor. Management is trying to determine what policies and practices make companies less vulnerable to white-collar unionizing, and unions are closely watching organizational attempts to see what new techniques or approaches improve successes in organizing attempts.

Management is watching because the advent of the union among white-collar employees inevitably changes patterns of relationships and the power structure in the organization, and may change the cost situation. Unions are watching trends because the white-collar worker is increasingly outnumbering the blue-collar employee and because the white-collar field is a natural new target for unions which historically have found their members among production, maintenance and craft workers. Thus far, the unions have found that the white-collar worker is relatively difficult to organize, although the unions cannot be considered unsuccessful in this regard.

There are trends of potential major consequence, however which are not receiving much attention. We refer to collective bargaining trends among certain groups of professionals in the United States—trends which have some very unusual aspects. Illustrative of a unique—and perhaps highly significant—bargaining trend is the collective bargaining situation among registered nurses.

History of Collective Bargaining by Nurses

Along with many other professional people, nurses first became interested in collective action in the depression of the 30's. The economic hardships of this period forced many professional employees to seek relief through union membership. Most nurses, however, found a conflict between unionization and their ethical standards, and for this reason the vast majority of nurses tended to resist organizing efforts of unions. Strike action in particular seemed contrary to nurses' responsibilities toward patients.

As described by Northrup, enough nurses did join unions, however, to present a problem to the American

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I.S.P.E. DIRECTOR SPEAKER AT TWO RECOGNITION DINNERS FOR NEW REGISTRANTS

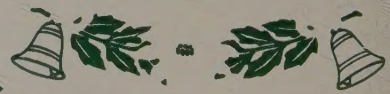
Robert J. Newbury, ISPE Executive Director, has begun to get acquainted at the "grass roots" level since coming to Illinois in September of this year. On November 15 he spoke before the Illinois Valley Chapter which honored seven newly registered engineers during the evening's program. Shown below are: Seated, left to right, Alvin Jensen, Joe Ellis, William W. Hotelling Jr.; standing, left to right, Lloyd Dixon, W. R. Hudson, James F. Shook, and Wilmer E. Teske.



On November 16, Newbury was the principal speaker at West Central Chapter's Recognition Dinner where the following newly registered honorees were presented NSPE lapel pins: left to right, J. Edson McCause, Lon B. Eberhart, Harold R. Lindstrom, Ted B. Urban, and Wesley Ling.



Season's
Greetings...



From Your Headquarters Staff

Nurses' Association (ANA). Aware of growing union strength and the growing sentiment of nurses favoring some kind of collective action, the ANA decided that decisive action was necessary in order to maintain its position of leadership with respect to its membership. If the nurses wanted collective action, the professional society rather than the traditional labor union was to be the instrument of such action.

Consequently in 1937, the ANA announced that it did not recommend union membership for nurses because of its conviction that "in their professional organization nurses had the instruments best fitted and equipped to improve every phase of their working and professional lives." At the same time, the state affiliates of the ANA were urged to assume individual responsibility for improving the employment conditions of their own members.

In 1941, plagued by rising costs, low wages, personnel shortages, long hours, and the reluctance of hospitals to improve conditions, the nurses of California were insistent in demanding economic relief. As in the 30's some nurses turned to unions for assistance. To thwart this movement and to ease the hardships of its members, the California State Nurses' Association (an affiliate of the ANA) decided upon an alternative course of action. Without the help of the State Hospital Association, the California Branch of the ANA proceeded to

secure a wage increase from the National War Labor Board. As a result of this successful representation, in 1943, the California State Nurses' Association polled its members as to whether or not they wanted their society to be their collective bargaining agent. With the overwhelming support of its members, this professional organization started to negotiate labor contracts with various hospitals and a few industrial plants in California.

Events in California prompted the American Nurses' Association to recommend collective bargaining activities to other state affiliates. Consequently, in its 1946 convention, the ANA formally adopted an "Economic Security Program"—a program of suggestions for affiliates to follow in developing their own collective bargaining contracts. It was indicated that the agreement should cover wages, hours, working conditions, and grievance procedures having at least three steps.

Feeling that this action was still not enough protection from trade unions, the ANA convention also passed a resolution indicating that the state and district nurses' associations were qualified to act and should act "as the exclusive agents of their respective memberships in the important fields of economic security and collective bargaining." The policy statement went on to urge state and district associations to establish policies permitting membership in only one collective bargaining

(Continued on Page 7)

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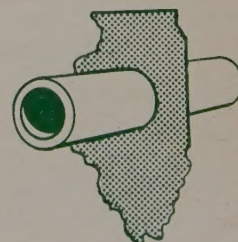
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PROFESSIONAL ENGINEERS OFFER AID IN CODE REVIEW

As a result of the Coroner's inquests into the recent deaths of Alderman and Mrs. Weber in Chicago, and the Franklin family of Evanston in 1959, by asphyxiation, changes in the building codes to prevent any possible reoccurrences of these tragedies were recommended.

Gerald Marks, P. E., President of the Chicago Chapter of the Illinois Society of Professional Engineers (ISPE), announced that, "In view of these findings, the ISPE, as a public service, will make available qualified registered professional engineers to assist local municipalities and public bodies in reviewing their codes and to make recommendations for changes. In Chicago, the ISPE has already written to Commissioner of Buildings Ramsey offering their services."

To implement this program, Marks stated, "ISPE is forming a Chicago area public service committee and has appointed Rudolph Wolfson, P. E., of 35 East Wacker, Randolph 6-2610, as Chairman. Although the immediate task of the committee will be to assist in the matter of code review, they are also working on the forming of a Professional Engineering Aid and Referral Bureau. The details concerning the operation of this bureau will be available in the very near future."

In discussing the matter of codes, Marks pointed out that, "For the most part, the structural engineering aspects of building codes have eliminated any dangers which might result from structural failures. However, due to the dynamic changes in our technology that have occurred since World War II, there are an increasing number of people being killed, maimed, or injured from the electrical and mechanical systems. The Weber and Franklin deaths are prime examples of inadequate building codes. Unless building codes are updated and kept current to take cognizance of our changing technological advances, it is possible that the number of people killed, maimed or injured from poor engineering practice in the codes, will continue to grow."

ISPE'S NEW IBM SYSTEM AT WORK

Initial conversion of our records to our new IBM system has been completed, and your 1961 dues statements will be mailed at about the same time as your December **Illinois Engineer**.

The second phase of the conversion is most important. If we do not have up-to-date information on YOU, may we? Check your August Membership Directory, please.

SOCIETY PROTESTS DAVIS-BACON COVERAGE OF SURVEY CREW MEMBERS

The National Society has asked Secretary of Labor James P. Mitchell to reconsider a recent Department ruling with regard to coverage of rodmen, chainmen and instrumentmen under the Davis-Bacon Act, and to give NSPE, and other interested organizations, an opportunity to present a detailed statement on why the ruling is neither desirable nor justified. The new Labor Department policy declares that *rodmen, chainmen and instrumentmen (serving under a party chief) are laborers and mechanics within the meaning of the Davis-Bacon Act*. That Act requires the payment of prevailing wages for laborers and mechanics working on Federal or Federally-aided projects, and sets up other conditions to be followed in all contracts for construction work performed with Federal funds. The new policy was effected without any advance notice or hearing or other opportunity for interested organizations or persons to express their views.

NSPE told Secretary Mitchell that *field survey party personnel are identified and regarded by the engineering profession as sub-professional employees, rather than as "laborers and mechanics."* The Society also pointed out that in some cases, particularly during the early period of experience for those entering engineering activities, engineering graduates are employed in the type of work covered by the ruling. "Placing such personnel in the category of 'laborers and mechanics' will have a most detrimental influence upon their career choice as they are in the first step of a professional career even though performing sub-professional work for a limited period of time," it was added.

The Secretary was also advised that rodmen, chainmen and instrumentmen of a survey party are *required to have technical knowledge and a basic understanding of the engineering and surveying aspects of their work*. Such positions, NSPE said, involve much more than physical or manual skills, and their duties are outside the commonly accepted meaning of "laborer and mechanic."

In further support of its position, NSPE referred to two rulings by the Attorney General of Ohio on the same question under a state law comparable to the Davis-Bacon Act. In both rulings, it was held that the state legislature "had in mind only men who work with their hands, and who are included in the commonly accepted definitions of 'mechanic', 'workmen' and 'laborer', and did not intend to include persons whose work is based on professional training."

The Society's request for a reconsideration of the Davis-Bacon Act ruling was authorized by its Board of Directors at the recent October Fall Meeting, after approval of a resolution to this effect submitted by the Ohio Society of Professional Engineers.

BUSINESS NEWSFRONT . . .**TANNENBERG CITED AS ARTICLE AUTHOR**

Elgin (Ill.) Daily Courier-News Thursday, November 10, 1960

Dieter Tannenberg, of Barrington, supervisor of testing engineering, in the Research and Development Division of Flexonics Corp., 840 N. State St., has been notified that he has been selected as one of the \$100 prize winners for his article published by Hydraulics and Pneumatics magazine.

The title of his article was "Significance of Hydraulic Hammer in High Pressure Circuits," and competed with entries from Canada, England, Israel and the United States. He received his award at the National Conference on Industrial Hydraulics at the Sherman Hotel in Chicago.

Mr. Tannenberg is a Engineer-in-Training Member of I.S.P.E. and the Dukane Chapter.

COLLECTIVE BARGAINING

(Continued from Page 5)

group. Dual membership, of course, would be impractical as soon as the professional association commenced bargaining, because two organizations are not going to be bargaining for the same people.

By 1958, registered nurses in a total of seven states and territories had written contracts with some 87 hospitals. By that year Minnesota had the most comprehensive program, with almost half of its more than 7,000 registered nurses covered by contracts in 22 per cent of its hospitals. California had about 2,000 registered nurses under collective bargaining agreements, representing 7 per cent of the state's hospitals and about 10 per cent of the total number of nurses in the state.

Nationally, in 1960 six state nurses' associations had collective bargaining contracts covering a total of 120 institutions or agencies and over 8,000 registered professional nurses. In some states there were master contracts covering several hospitals in one city or area.

Gaining recognition by hospital managements for the purposes of collective bargaining is a current problem facing the state nurses' associations. In September, 1957, after a long struggle for recognition, the Washington State Nurses Association finally reached an agreement with the Washington Hospital Association on the following points: (1) Each of two organizations had the right to designate representatives to negotiate wages, hours and working conditions; (2) hospitals should discuss these terms with their nurses; (3) there should be local negotiations between a group of hospitals and their nurses, or one hospital and its nurses; and (4) grievance procedures should be established for use both by nurses and by the hospital administration. This pact between the two associations was not binding on the individual hospitals, and many hospitals continued to be individually opposed to bargaining with the nurses.

N.S.P.E.'S NEW FIELD REPRESENTATIVE

Colonel J. D. Strong, USA, Ret., has been appointed as field representative of the National Society of Professional Engineers. The originator of the Army's professional engineer preparatory course for qualified personnel of the Armed Services who desire to obtain registration, Colonel Strong retired from service in the

U. S. Army Corps of Engineers last year.

A native of Minnesota, he received his B.S. in Civil Engineering from Yale University and is a graduate of the Army's Engineer School and the Command and General Staff College.

The new field representative of the 52,000-member engineering group will assist state societies and chapters in an expanded program



of orientation and information concerning the National Society's objectives and activities.

Colonel Strong is registered as a professional engineer in the District of Columbia, and holds membership in the Society of American Military Engineers, and the American Society for Engineering Education. He is also a Fellow of the American Society of Civil Engineers, and is a member of the Engineering Manpower Commission of the Engineers Joint Council.

As a result, the Washington State Nurses Association passed a resolution at its 1958 convention to further promote collective bargaining with the state.

A major handicap to the ANA in its promotion of collective bargaining is Section 2 of the Taft-Hartley Act, which excludes employees of nonprofit hospitals from coverage under the law. This means that nurses in most hospitals may not request representation elections, may not file unfair labor practice charges with the National Labor Relations Board if the management of a hospital refuses to bargain, and have no recourse to federal agencies if discharged for union activity, etc. It is of interest to note that the 1956 ANA Convention passed a resolution calling upon the President of the United States and Congress to amend the Taft-Hartley Act to remove this exemption pertaining to nonprofit hospitals.

Not Traditional Unionism

The question that might be asked at this point is: "Isn't this traditional unionism?" The answer: "Not

(Continued on Page 8, Column 2)

JOLIET CHAPTER HOLDS RECOGNITION DINNER

The Joliet Chapter of the Illinois Society of Professional Engineers recently honored the newly Registered Professional Engineers and Engineers-in-Training at their annual recognition dinner.



Pictured from left to right, are the new Registered Professional Engineers, their wives, and honored guests: Mr. Gordon Martyn, Mr. and Mrs. Herbert Nelson, guests Mayor and Mrs. James P. Hennessy, Mr. and Mrs. Robert Rogel, and Mr. and Mrs. Ronald Reder.

The dinner was also designated as "Ladies Night", with all regular members and their wives invited. Entertainment for the evening was provided by Mr. Ben Borkon, Architect associated with the architectural and engineering firm of Alexander, Borkon, and Westphal. Mr. Borkon's colored slide presentation of the architecture and scenic beauty of England, Scotland, and Wales proved to be an interesting highlight of the evening, by bringing out the vast differences between the United States and England.

LeSUEUR H. HENDRICK

Capital Chapter lost one of its most faithful members, November 22, 1960, when LeSueur H. Hendrick passed away. Mr. Hendrick was Capital Chapter President in 1955. LeSueur, not an aggressive but a very progressive member, was well-liked and always willing to do more than his share to promote professionalism and the objectives of ISPE-NSPE.

He started with the Illinois Division of Highways in 1918 as a Resident Engineer in District 6 (Springfield). In 1923 he went with the Bureau of Maintenance of the State Division of Highways. Sometime later he was made Assistant Engineer of Maintenance for the Bureau. In 1951 he became Field Engineer for the Bureau of Maintenance where his work was primarily on the maintenance of all types of bridges.

As a member of the Illinois Society of Professional Engineers he showed particular interest in scholarships and programs for young engineers. He was also a member of the IAHE, Springfield Chapter.

quite." Collective bargaining by professional nurses associations is part of a unique labor relations movement in the United States.

In the first place, the nurses emphasize that they are a professional society. In the second place, in general, they have repudiated the use of the strike as a weapon in collective bargaining. In 1949 and 1950, respectively, the ANA board of directors and the ANA house of delegates reaffirmed the "professional nurses voluntary relinquishment of the right to strike and the use of any other measures wherever they may be inconsistent with the professional nurses responsibilities to patients . . . and its conviction that this voluntary relinquishment of measures ordinarily available to employees in their efforts to improve working conditions imposes on employers an increased obligation to recognize and deal justly with nurses through their authorized representatives in all matters affecting their employment conditions."

Strike repudiation by nurses, therefore, is not unqualified, as indicated in the second half of the ANA policy statement. Furthermore, nurses have taken action partially resembling strike action in a few instances, as indicated in the following excerpt from a letter from a member of the administrative staff of the California State Nurses' Associations. It is important to recognize, however, that the collective action taken, while somewhat like strike action, differed in some important respects.

"Our historical files reveal that in the early 1940's, a group of nurses threatened to go on strike but it did not materialize. This threat was independent and not under leadership of the Association but it did support the fact that nurses were becoming restive and perhaps was one of many factors which pointed up the need for the Association to assume an active role in nursing economics. The California State Nurses' Association pioneered in the field of collective bargaining for nurses and actual discussions concerning the adoption of such a program began here in 1942. Since the launching of the Economic Security Program by CSNA, we do not find that there is any record of strike action by nurses in the strict application of the term. Considering, however, the general application of the term 'strike', our records show that there were activities such as mass resignations and refusals to accept pay for services (1948-1952). In the case of mass resignation, the situation involved renewing contracts and the nurses were adamant in their position that they would not accept management's final offer. Resignations were presented in writing but the termination dates were staggered so that coverage for patient care could be assured. The matter of refusal of pay for services was in the case of attempting to gain recognition. After several months of persuasion with no results, the nurses agreed to notify management and the patients that on a certain date

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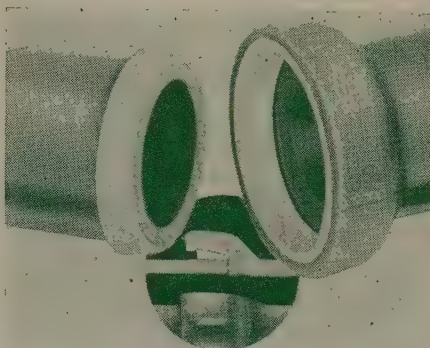
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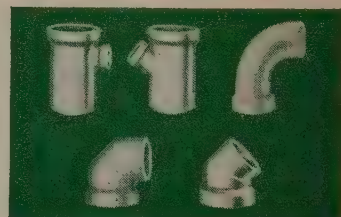
For more information on how Amvit can help cut your sewer project costs, write or call American Vitriified Products Company, at our office nearest you.

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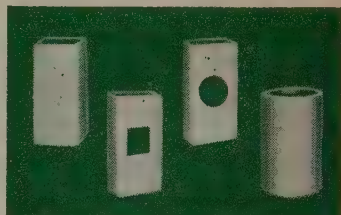
Cleveland	TO 1-6750	Los Angeles	EL 9-4535
Chicago	ST 2-5243	Milwaukee	HO 6-4990
Detroit	GA 1-1940	St. Louis	HA 9-5400
Somerville, N. J. FO 9-4378			



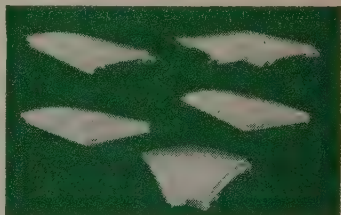
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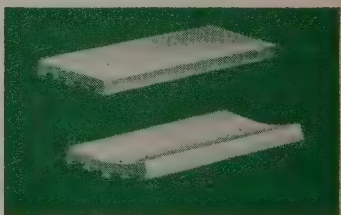
FITTINGS—More than 35 different fittings are available with or without the Amvit Joint. There are fittings to solve every problem.



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they would be reporting to work but would be donating their services and at this time the nurses urged the patients to seek adjustments in their hospital bills which would reflect the deletion of the cost of registered nursing service which was being donated. We find that management went to far as to grant salary increases and other improved conditions of employment which were being proposed by the nurses but refused to negotiate with the Association. The nurses elected to accept management's offer and backed away from further collective bargaining activities.

"Another case involved nurses in six metropolitan hospitals (1946-1947) where the operating room nurses notified management that they would as of a certain date refuse to accept 'on call' duty unless they were paid time and one half the straight time pay pending recognition and negotiating of an agreement. Management resolved this problem by staffing the evening and night shifts so that there would be no further need for the 'on call' procedure."

It is important to emphasize that, in the case of mass resignations, the nurses resigned—which is not the case in typical strike action. The striker ordinarily does not resign and retains certain protections afforded him by federal law and NLRB rulings. Not so in the case of the nurse. In the case of refusal to accept pay, the nurses continued to work, which again is unlike any strike action we have heard of. In both cases, patient care was assured. In the case of "on call" assignments, the action more nearly approached typical strike action.

Parallel Situations

It is difficult to find any comparable mixture of bargaining by a professional group and strike repudiation in the American labor movement. For example, although unions of federal employees, such as the Letter Carriers Association, are forbidden to strike by Section 305 of the Taft-Hartley Act, this is repudiation of strike action by law—not voluntary repudiation. The American Federation of Teachers has a "no strike" policy, but it is clearly a union within the AFL-CIO. (The AFT will be discussed later in this article.) The "no strike" pledge of the AFL and the CIO unions in World War II was a temporary emergency measure of a nonbinding nature and, indeed, was violated by the United Mine Workers in 1943.

The closest parallels to the ANA situation are probably the American Society of Civil Engineers, the National Education Association and the American Chemical Society, with the ASCE the closest approximation to the ANA in terms of collective bargaining. These groups present some similarities, but also some differences, in comparison with the nurses.

The ASCE.—In October of 1943, during World War II, the board of direction of the American Society of Civil Engineers recommended to its "local sections"

that they amend their constitutions to make it possible for employee members to form groups to bargain collectively. Money was appropriated for legal assistance and advice. As of January, 1944, 13 sections had changed their constitutions accordingly. The motivation for this move seemed to stem from a concern with the economic status of the engineer plus considerable resistance to being included in bargaining units along with nonprofessionals.

In January, 1945, the board stated that an "essential duty of each committee should be the 'know how' and the readiness, when circumstances dictate, to help in the formation of professional collective bargaining units."

In October of that year, the board issued this policy statement: ". . . that the society give all practicable assistance to its members in the field of collective bargaining and the Secretary . . . render this assistance as effectively as funds, staff facilities, and legal limitations will allow."

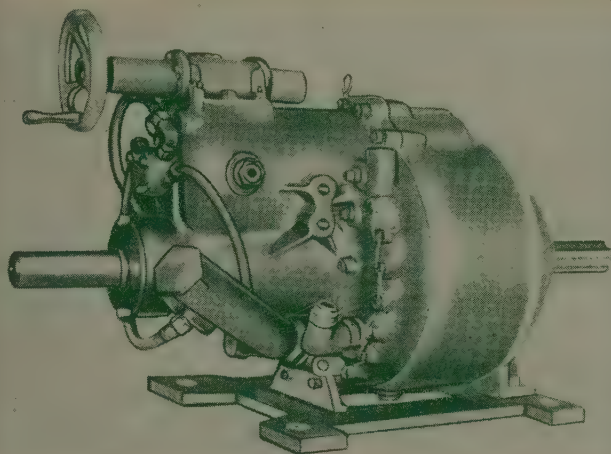
It is interesting to note that the collective bargaining by ASCE members as described in *Civil Engineering* was bargaining by units comprised of professional engineers in addition to civil engineers and that these units were not ASCE units as such. In short, the ASCE supported collective bargaining but did not bargain as an organization, which is in contrast to the nurses. As to attitude and policy about strike action, no mention was found in *Civil Engineering*, although Northrup states that the board of direction proposed prohibition of the use of strike action in 1943.

A 1953 survey of ASCE members indicated that three out of five respondents were opposed to collective bargaining; one out of four thought collective bargaining to be to their advantage; and of the latter group, only 4 per cent preferred representation by craft of labor unions rather than by a professional bargaining group. A 1958 survey resulted in about four out of five member respondents answering "no" to this question: "Do you consider that collective bargaining is, or would be, advantageous to you?" Of the 16 per cent who said "yes," only about 6 per cent said they would prefer to be represented by a union rather than by a group of professionals. As of 1960, only 2.4 per cent of the ASCE membership belonged to bargaining groups. It would seem that the ASCE membership is becoming less and less interested in collective bargaining.

The NEA.—Teachers' associations provide additional interesting parallels and contrasts to the collective bargaining activities of nurses' associations. In contrast to the no-strike pattern of nurses' associations, teachers have engaged in a number of strikes. Although Northrup says that "NEA affiliates have been involved in more strikes that have local unions of the American Federation of Teachers," Lieberman concludes otherwise. Lieberman says that the National Education Association has been "somewhat more successful than

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the AFT in preventing strikes by teachers." Lieberman goes on to say that neither organization has been completely successful in preventing strikes by members, and that AFT locals were involved in 29 strikes between 1940 and 1954 while the NEA locals were involved in 22 strikes.

As to policy, Lieberman claims that the NEA has no official strike policy other than condemning strike action which breaks contracts, and that the NEA has never advocated that teachers should have the right to strike. He goes on to say, however, that many NEA publications "either advocate renunciation of the right to strike or condemn strikes as 'unprofessional,'" and that "a few assert flatly, although without any documentation, that the NEA has a no-strike policy." In contrast, the American Federation of Teachers *does* have a no-strike policy which was urged on the AFT by its own leaders and the American Federation of Labor. Both the NEA and the AFT have approved specific strikes, however.

The NEA, then, has no clear strike policy; some of its member groups have struck; and many affiliates bargain collectively with school administrators and school boards. The latter has been documented by Northrup, and by Yabroff and David.

The ACS.—The American Chemical Society apparently has not engaged in any collective bargaining, but after the 1942 NLRB "Globe" case, the ACS encouraged the formation of unions in cases where collective bargaining was desirable. This was similar to the action taken by the ASCE. A poll mentioned by Northrup, however, indicated that, some years later, the overwhelming majority of the ACS membership was unqualifiedly opposed to unionization. This is probably the poll mentioned by Fernelius, which indicated that 73 per cent of the members were opposed to the unionization of the professional worker, and only "6 per cent indicated that they were in favor." No reference was found to any recent encouragement of the ACS as to collective action, nor to any collective bargaining by the Society itself or its affiliates at any time.

Implications

What are the implications of the existence of professional organizations such as the ANA affiliates, which seek to bargain collectively for their members on the subject of wages, hours and working conditions, and have thus far repudiated strike action as a tool in collective bargaining? And what are the implications of the history of the ASCE, the NEA and the ACS with regard to collective action? It seems to us that there are several important implications.

In the first place, white-collar professionals and white-collar employees who are not now covered by collective bargaining contracts might make one of four choices, depending upon the extent to which their needs

(Continued on Page 14)

DICKEY CO. DEDICATES \$5.4 MILLION PLANT AT BIRMINGHAM-BESSEMER

Dedication ceremonies December 8 marked the formal opening of the W. S. Dickey Clay Mfg. Co.'s new \$5.4 million ultra-modern Birmingham-Bessemer, plant in Bessemer, Alabama.

One of seven Dickey plants, the new facility is part of a long-range modernization and expansion program intended to cope with the increasing demand for Dickey clay products in the Southeast.



All the advancements in Dickey's pipe making methods during the last 75 years—from hand molding and horsepower to push button automation—are included in the new Bessemer plant. Among the innovations are pressure sealed drying rooms, 12-ft. stacks on the periodic kilns (formerly 60-ft. high), electrically operated vertical hydraulic press, the largest straight-line tunnel kiln being used for vitrification of clay sewer pipe, and many new materials handling techniques.

With an initial rated capacity of 55,000 tons per year, the new plant will manufacture a complete line of Dickey clay pipe in 4- through 36-inch diameters, Dickey couplings, flue lining, wall coping and related clay products. The 820-foot, two-unit plant contains 254,000 sq. ft. of manufacturing space and includes a clay storage building with a maximum capacity of 20,000 tons.

Located in suburban Bessemer, some 15 miles southwest of Birmingham, Alabama, the new facility is built

(Continued from Page 3)

RECOMMENDATION No. 3: NSPE should make no attempt to foster an organization for Engineering Technicians within its own structure.

RECOMMENDATION No. 4: NSPE Occupational Guidance Activities should include guidance for prospective Engineering Technicians in the same manner that guidance activities are conducted for prospective Professional Engineers.

RECOMMENDATION No. 5: NSPE should, consistent with the objectives of the Society, be concerned with anything that would improve the situation of the Engineering Technicians and this would include Industrial Training Programs.

RECOMMENDATION No. 6: NSPE should make no attempt to foster by legislation qualifications for Engineering Technicians.

RECOMMENDATION No. 7: NSPE, in cooperation with the Technical Institute program and other suitable Technician Training programs should follow the same pattern that now exists with the Engineering College program.

RECOMMENDATION No. 8: NSPE should develop a Certification Procedure for Engineering Technicians.

RECOMMENDATION No. 9: The Engineering Technician Committee recommends to the Board for action that there shall be 3 grades of Engineering Technicians. These grades shall be as follows:

1. ENGINEERING TECHNICIAN TRAINEE (ET)²
2. ENGINEERING TECHNICIAN (ET)
3. CERTIFIED ENGINEERING TECHNOLOGIST (CET)

A diagram of the pattern for progression through these grades and indicating the general requirements for qualification is an integral part of this recommendation.

RECOMMENDATION No. 10: The ETC recommends that the NSPE Board authorize the establishment of an "Institute for the Certification of Engineering Technicians and Certified Engineering Technologists" and that the ETC be charged with the task of implementation as soon as possible.

on a site containing a large deposit of high grade clay. This site was selected after an extensive geological survey of the area and contains sufficient clay to supply manufacturing needs for 35 to 40 years at present rates of production.

Completion and dedication of the Bessemer plant climaxes the celebration of the W. S. Dickey Clay Mfg. Co.'s Diamond Jubilee year. Six other Dickey plants are located in Pittsburg, Kansas; St. Louis, Missouri; Texarkana, Texas-Arkansas; San Antonio, Texas; Meridian, Mississippi, and Chattanooga, Tennessee. The company is headquartered in Kansas City, Missouri, where it started 75 years ago.

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and aspirations are met. One alternative is to avoid any collective bargaining action. If their needs are met within the present framework of their employing organizations, they are not likely to turn either to unions or to collective bargaining by professional organizations. The history of the ASCE and the ACS would suggest this. Collective bargaining will continue to be perceived as contrary to the ideals of individual initiative, creativity, and professional and class status—or simply unnecessary.

If needs are *not* met, a second alternative for the white-collar employee is to turn the professional society (and there are hundreds of so called "professional" organizations in the United States) into instruments for collective bargaining. This seems to be the present pattern of the NEA and the ANA. Such organizations in turn might or might not repudiate strike action. It is our belief that policy about strike action would be a function of two things: (1) the ethical standards of the occupation or profession and (2) the extent to which management provoked defensive and aggressive behavior through personnel policies and practices. Strike action seems to be in serious conflict with the ethical standards of nurses at the present time, but less in conflict in the case of teachers. Other professional groups might have even fewer compunctions about strike action. We know a president of an organization which bargain collectively for its members who asserts that strike action can be "the most professional thing a man can do."

A third alternative is for the professional organization to urge and assist members in the forming or joining of unions of professional people. This was the World War II pattern of the ASCE and the ACS. It is not likely that such unions would repudiate strike action. At least, we see little evidence of this in the past or the present.

The fourth alternative, of course, is for the white-collared worker, including the professional, to turn to the traditional type of labor union. It is our belief that this is not likely to occur unless the unions are successful in either (1) changing a white-collar worker's concept of himself or (2) drastically changing the white-collar worker's concept of unionism. The history of collective bargaining by nurses and other professionals suggests that neither is easily accomplished.

Changing the white-collar worker's concept of himself to so unlikely as to be absurd, it seems to us, but the other is a possibility. Unions are beginning to wake up to the fact that they must change their approach to the white-collar worker if they are going to be successful in organizing these people. Sooner or later they may find a formula for creating an image of unionism which will be compatible with the white-collar worker's concept of himself.

It is obvious that the unions are currently attempting to change their image. For example, John Living-

ston, the AFL-CIO's top organizer, recommends that the recruiting of white-collar workers be done by a "high calibre staff . . . dedicated, smart and able to handle the different kinds of problems that these workers have." Strauss refers to a change in tactics taking into account "middle class" goals and the use of a "middle class approach." On June 24, 1960, Bob Nichols reported on radio station KIRO, Seattle, that the Retail Clerk's Union was spending a half-million dollars on Dave Garroway's television show to build up a better image of members in the public eye.

And union leaders, themselves, present quite a different picture from the stereotype of the labor boss of yesteryear. James A. Suffridge, president of the Retail Clerk's Union, is an articulate, eloquent, well-educated Republican. Arnold Zander, president of the American Federation of State, County, and Municipal Employees, is a Ph.D from the University of Wisconsin. Dan Hendricks, president of the Seattle Professional Engineering Employees Association, has an M.S. in Mechanical Engineering from the California Institute of Technology, and is another articulate and eloquent spokesman of a collective bargaining organization. The image which this type of leader presents is bound to have an impact on the traditional notions that the white-collar worker has had about collective bargaining groups.

The fact that unions have not yet been universally successful in creating the image of this "new union" does not mean that they will be forever unsuccessful. The question may really be whether or not the white-collar worker will be dissatisfied enough at that particular point in time when the unions achieve significant success in changing their own image.

Conclusion

If managements are successful in meeting the needs of the presently nonunionized employees, we may find an era of the *status quo* or even a decline in union membership because of an increased proportion of white-collar workers in the labor force. If managements are not successful in meeting the needs of the white-collar workers, we may see (1) "quasi-unionism" developing along the lines of the state affiliates of the American Nurses' Association, with or without strike action; (2) "professional" associations assisting in organizing, or advocating membership in, white-collar unions comprised of "professionals" and with a resulting increase in such membership; or (3) increasingly successful organizing attempts by the traditional unions, depending upon their success in changing the image which they present to the public. The American Nurses' Association, a "quasi-union," may be indicating the direction in which the white-collar worker is going. Collective bargaining by such professionals may be a white-collar trend of the future or an anomaly on the American scene. It will be interesting to see which. (*The End*)

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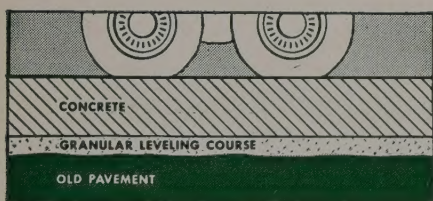
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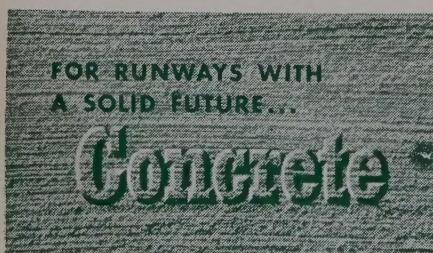
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